

CALIFORNIA ENERGY COMMISSION

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May 2, 2005

Ms. Barbara Hale, Assistant General Manager for Power
San Francisco Public Utilities Commission
City and County of San Francisco, General Management Office
1155 Market Street, Floor 11
San Francisco, CA 94103

DOCKET	
04-AFC-1	
DATE	MAY 02 2005
RECD.	MAY 03 2005

Dear Ms. Hale:

RE: SAN FRANCISCO ELECTRIC RELIABILITY PROJECT (SFERP) DATA REQUESTS 161 through 193

Pursuant to Title 20, California Code of Regulations, section 1716, the California Energy Commission staff requests the information specified in the enclosed data requests. The information requested is necessary to: 1) more fully understand the project, 2) assess whether the facility will be constructed and operated in compliance with applicable regulations, 3) assess whether the project will result in significant environmental impacts, 4) assess whether the facilities will be constructed and operated in a safe, efficient and reliable manner, and 5) assess potential mitigation measures.

These data requests are being made in the technical areas of Cultural Resources, Efficiency, Noise, Transmission System Engineering, Waste Management, Water and Soil Resources, and Visual Resources. Written responses to the enclosed data requests are due to the Energy Commission staff on or before June 2, 2005, or at such later date as may be mutually agreed upon.

If you are unable to provide the information requested, need additional time, or object to providing the requested information, please send a written notice to the Committee and me within 10 days of receipt of this notice. The notification must contain the reasons for the inability to provide the information or the grounds for any objections (see Title 20, California Code of Regulations, section 1716 (f)).

If you have any questions regarding the enclosed data requests, please call me at (916) 654-4206.

Sincerely,

BILL PFANNER
Energy Facility Siting Project Manager

Enclosure

cc: Docket (04-AFC-1)
Proof of Service List (Interested Parties/Agencies)

PROOF OF SERVICE (REVISED 4-19-05) FILED WITH
ORIGINAL MAILED FROM SACRAMENTO ON 5-2-05

**San Francisco Electric Reliability Project (SFERP)
Supplement A Data Requests
(04-AFC-1)**

Technical Area: Cultural Resources

Authors: Beverly E. Bastian and Gary Reinoehl

BACKGROUND

Section 8.3.3.6.1 of Supplement A summarizes the results of an archaeological field survey of the new project plant site, transmission alignment, natural gas pipeline route, and water supply pipelines (process and potable) conducted on February 21, 2005. No individual report of this survey has been provided with this application.

DATA REQUEST

161. Please provide a technical report in Archaeological Resource Management Reports (ARMR) format documenting the February 21, 2005 archaeological survey (methodology, transect intervals, ground visibility, etc.) prepared by an individual that meets the U.S. Secretary of the Interior's Professional Standards. Please append a copy of the record search (NWIC 04-687) to the technical report. If the ARMR identifies any site locations the report should be submitted under confidential cover.

BACKGROUND

Section 8.3.3.6.7 of Supplement A contains a discussion of the efforts made by the previous applicant, SECAL/Mirant, and the cultural resources firm, CH2M HILL, to initiate Native American consultation on an earlier power plant project, located two blocks north of the present project proposed by the City and County of San Francisco (CCSF). From this discussion, it is clear that the CCSF has not consulted with Native Americans about possible impacts to resources of concern to them in the new location of the proposed power plant.

In December, 2003, the Native American Heritage Commission (NAHC) provided CCSF with a list of Native American contacts with historic ties to the project area. In that letter, the NAHC advised: "If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received." Native American contact efforts by CCSF for the previous proposed plant site are outlined in Supplement A, Section 8.3.3.6.7. The discussion provides no indication that the officially requested follow-up telephone contacts were carried out.

DATA REQUEST

162. Please contact the NAHC, request a current list of the names, addresses, and telephone numbers of Native Americans having historic ties to the project area, and send a letter and map indicating the new project area, with the request that they notify your Cultural Resources consultant if they know of any cultural resources that could be affected by the revised project. Please provide Energy

San Francisco Electric Reliability Project (SFERP)
Supplement A Data Requests
(04-AFC-1)

Commission staff with copies of the letters to the Native Americans on the NAHC list and copies of any written responses received from Native Americans.

163. If responses from Native Americans are not received in the time allowed, please make follow-up telephone calls and provide Energy Commission staff with copies of either letters from the NAHC responding to your request(s) or telephone logs of the calls, evidencing that the notification was made and documenting any other information provided by Native Americans.

BACKGROUND

In the Supplement A, the applicant did not provide a map or written description of the Impact Area (IA) of the project. Staff needs to determine if impacts from the construction of the linear facilities will extend beyond their proposed footprints.

DATA REQUEST

164. For the trenches of the transmission alignment (two alternate routes), the natural gas pipeline route, and the water supply pipelines (process and potable (two alternate routes)), please provide a discussion of:
- a) the width and maximum depth of the trenches;
 - b) the width of the construction area to either side of the trenches;
 - c) the location and size in all three dimensions of the starting and ending pits for the jack-and-bore segments of the trenches including the description of the construction area around the pit;
 - d) the location of areas where excavated soil ~~will be~~ stored before backfilling;
 - e) any soil disturbing activities that will be done ~~on~~ areas where trench and other construction equipment will be stored and ~~where~~ and of what size those storage areas will be; and
 - f) the impact of vibrations from the construction of the trenches on the historic buildings within one block to either side of the trenches, especially along Third Street between 20th and 23rd Streets.

BACKGROUND

The Supplement A indicates that the process water pipeline on Marin Street, Mississippi Street, and part of Chavez Street will be installed in existing collection boxes.

DATA REQUEST

165. Please indicate whether the entry into the existing collection boxes will disturb the earth around the boxes, and, if so, in what way and to what extent.

**San Francisco Electric Reliability Project (SFERP)
Supplement A Data Requests
(04-AFC-1)**

BACKGROUND

Review of multiple sections of the SFERP Supplement A (pp. 1-2; 1-6; 2-1; 7-1; 8.11-12; 8.14-14) reveals that the specifications for the process water pumping station to be located on Marin Street are not clearly set out.

DATA REQUEST

166. Please indicate whether the process water pumping station is new construction or re-use of an existing structure.
167. If the process water pumping station would re-use an existing structure, please indicate if the structure to be re-used meets the criteria for eligibility to the California Register for Historic Resources (CRHR), and, if so, what impacts the re-use will have on the structure.
168. If the process water pumping station would re-use an existing structure, please indicate how much ground disturbance the adaptation will cause both vertically and horizontally.
169. If the process water pumping station would require construction of a new structure, please indicate how large the new structure is, whether it is above or below ground, and how much ground disturbance the construction will cause both vertically and horizontally.

BACKGROUND

The Supplement A does not assess the impact of the change in setting which the proposed project will impose on two historic sugar warehouses.

DATA REQUEST

170. Please provide a description of the change in setting and feeling to the two historic sugar warehouses located on the south side of 23rd Street, east of Michigan Street that would occur because of the construction of the project and assess the impact to the two warehouses.

BACKGROUND

In Data Responses Set 1A, provided by SFERP, the response to Data Request 23, provided a District Record (DPR 523) for a proposed Central Waterfront Historic District. The boundaries for the district are described as 16th Street to the north, Interstate 280 to the west, Islais Creek to the south, and San Francisco Bay to the east. The supplementary application describes the project site and most of the linear facilities as being within the district.

DATA REQUEST

171. Please provide a discussion of the character-defining features of the district and the impacts of the project to the proposed Central Waterfront Historic District by an individual who meets the U.S. Secretary of the Interior's Professional

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(04-AFC-1)

Standards for history or architectural history. Please ensure that the discussion includes changes in the attributes of integrity, and address whether the impacts would materially impair the eligibility of the proposed district.

BACKGROUND

The supplemental application states that a site history report to describe past uses of the site will be prepared (p. 8.9-12).

DATA REQUEST

172. Please provide a copy of any site history report prepared for this project.

BACKGROUND

The Supplement A states that a geotechnical boring study of the proposed site will be done (p. 10G-4). Such a study could provide information on submerged cultural resources located on the former Bay floor.

DATA REQUEST

173. If geotechnical boring has not yet been completed, please have an archaeologist, who meets the Secretary of the Interior's Professional Standards, monitor the boring and write a report, consistent with ARMR format, on any cultural materials present in the cores, descriptions of sediments, and an assessment of the potential of the project to disturb buried cultural resources. Please provide staff with a copy of that report within 30 days of completion of the boring. If it is not possible to meet that schedule, please provide staff with a projected date for submitting the report.

BACKGROUND

The Supplement A postpones a decision on the necessary depth of the foundations of the components of the power plant site, but describes the fill on which the plant will be built as quite variable in depth (up to 40 feet), and of a character probably requiring the use of pilings or caissons (p. 10G-4-5). Pilings or caissons could potentially impact any cultural resources buried under the fill at the proposed plant site, such as sunken vessels, lost cargoes, collapsed wharves, and buried or submerged archaeological sites. The application makes no mention of the potential for submerged historic-period resources under the fill at the plant site. More information is needed for staff to assess the potential for submerged or buried archaeological resources.

DATA REQUEST

174. Please provide a detailed discussion of the history of the nineteenth and twentieth century filling of the bay in the area bounded by old Potrero Point on the north, Mississippi Street on the west, and Islais Creek on the south, including maps depicting the progression of the filling.

**San Francisco Electric Reliability Project (SFERP)
Supplement A Data Requests
(04-AFC-1)**

175. If the project site was underwater prior to the filling, please consult Pam Griggs (916-574-1854) with the State Lands Commission and with the San Francisco Maritime Museum to determine if there are known shipwrecks in the project site and provide a copy of maps or other information obtained by this search.
176. Using the maps cited in the Cultural Resources "References" (Section 8.3.9) and additional information on the project area gathered from the files and publications of San Francisco historical organizations, please provide a discussion of the potential for submerged or buried cultural resources under the fill at the proposed plant site.
177. If the archeological assessment of the geotechnical boring at the plant site and/or the requested assessment of the potential for submerged or buried cultural resources indicate the possible presence of such cultural resources, please provide a discussion of what impact the proposed pilings or caissons will have on those resources.

BACKGROUND

The application acknowledges the high potential for the presence of prehistoric archaeological resources on the western end of the process water pipeline route, but fails to include that area on their map of the prehistoric shoreline (Figure 8.3-2). To appropriately assess the potential for prehistoric archaeological resources at the plant site, along the process water pipeline, and at the construction site of the water pumping station, staff needs more information on the horizontal extent of the shoreline in the area of Marin, Mississippi, and Cesar Chavez Streets, and Interstate 280.

DATA REQUEST

178. Using the maps cited in the Cultural Resources "References" (Section 8.3.9) and any additional relevant sources, please provide a map delineating the earliest known shoreline in the area of Marin, Mississippi, and Cesar Chavez Streets, and Interstate 280.

**San Francisco Electric Reliability Project (SFERP)
Supplement A Data Requests
(04-AFC-1)**

Technical Area: Efficiency
Author: Kevin Robinson

BACKGROUND

As designated in the AFC Supplement A, the applicant states that the SFERP is a peaking facility and will be operated as a dispatchable power plant (SFERP 2005a, AFC §§ 10.3.2, 10.4).

DATA REQUEST

179. Please elaborate and define the intended uses (such as ancillary service, peaking, load following, voltage support, frequency support, etc.) of the SFERP.

BACKGROUND

In the Alternatives section of the AFC Supplement A, the applicant does not address the possible alternative of a combined cycle facility (SFERP 2005a, AFC § 9.0).

DATA REQUEST

180. Please evaluate a combined cycle alternative and compare this to the proposed simple cycle facility. Also support the reasoning behind the choice of a simple cycle project instead of a more efficient combined cycle project.

**San Francisco Electric Reliability Project (SFERP)
Supplement A Data Requests
(04-AFC-1)**

Technical Area: Noise

Author: Steve Baker

BACKGROUND

The project will create noise that may or may not adversely affect several residential receptors near the project site. These receptors are described only vaguely. In order to properly evaluate potential noise impacts on sensitive receptors, staff would like to know the nature of these residences.

DATA REQUEST

181. Please describe, in general terms, the residential receptors at locations R-1 through R-4 (AFC Supplement, § 8.5.4) in more detail. Describe the nature of each residential use (apartments, single or double dwelling units, etc.) and the approximate number of such units at each location.

San Francisco Electric Reliability Project (SFERP)
Supplement A Data Requests
(04-AFC-1)

Technical Area: Transmission System Engineering
Author: Mark Hesters

BACKGROUND

Staff needs to completely identify facilities required for termination of the project and all "downstream" transmission facilities required by interconnection of the project. The System Impact Study provided in the AFC studied the project with a 900-foot interconnection to the Potrero substation. The AFC Supplement A describes two possible 3000-foot underground cables to the Potrero substation. Staff needs an approved facility study for the new interconnection.

DATA REQUEST

182. Provide a Facilities Study completed by PG&E for any interconnection for which you are seeking certification. The study or studies should, at a minimum, demonstrate conformance or non-conformance with National Electric Reliability Council/Western States Coordinating Council (NERC/WSCC), California Independent System Operator (Cal-ISO) and utility reliability and planning criteria with the following provisions:
- a) Identify major assumptions in the base cases including imports and exports to the system, major generation including hydro, load changes in the system and queue generation.
 - b) Analyze system for Power Flow for N-0, important N-1 and critical N-2 contingency conditions, and provide a list of pre and post project overload criteria violations.
 - c) Analyze system for Transient Stability and Post-transient voltage conditions under critical N-1 and N-2 contingencies, and provide related plots, switching data and a list of voltage criteria violations.
 - d) Provide a Short Circuit Study Report showing fault currents at important substation buses with and without the new generation and respective breaker interrupting ratings in a table side by side.
 - e) Identify the reliability and planning criteria utilized to determine the criteria violations.
 - f) Provide a list of contingencies evaluated for each study.
 - g) List mitigation measures considered and those selected for all criteria violations.
 - h) Provide power flow diagrams (MW, % loading & P. U. voltage) for base cases with and without the project. Power flow diagrams must also be provided for all N-0, N-1 and N-2 studies where overloads or voltage violations occur.

San Francisco Electric Reliability Project (SFERP)
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(04-AFC-1)

- i) Provide electronic copies of *.sav and *.drw GE PSLF and EPCL contingency and comparison files (if available).
 - j) A letter approving the Facilities Study.
183. Provide the Cal-ISO Final Interconnection Approval letter for the new interconnection to the Potrero substation.

**San Francisco Electric Reliability Project (SFERP)
Supplement A Data Requests
(04-AFC-1)**

Technical Area: Waste Management
Author: Alvin Greenberg, Ph.D.

BACKGROUND

The proposed new location is likely to be contaminated with hazardous wastes. A site investigation conducted in 1999 for the adjacent property on which the MUNI project is proposed to be built found soils contaminated with petroleum hydrocarbons, arsenic, and lead. It is necessary to have full and complete Phase I, and if necessary, Phase II Environmental Site Assessments in order for staff to assess the impacts of waste generation and also to assess potential health impacts to workers and the off-site public.

DATA REQUEST

184. Please conduct Phase I, and if necessary, Phase II Environmental Site Assessments and provide staff with full and complete reports.

**San Francisco Electric Reliability Project (SFERP)
Supplement A Data Requests
(04-AFC-1)**

Technical Area: Water and Soil Resources
Author: Richard Latteri

BACKGROUND

Because the SFERP construction site will be larger than one acre, a National Pollution Discharge Elimination System (NPDES) permit for Stormwater Runoff from Construction Activities is required. To evaluate the potential impacts from stormwater runoff, it is necessary to identify run on/runoff quantities and characteristics for the SFERP site and areas associated with the project (laydown/staging areas, parking area, and linear facilities). Stormwater and erosion/sediment control plans are components of the SWPPP and are crucial to the evaluation of potential impacts related to construction of the SFERP.

DATA REQUEST

185. Provide the pre- and post-construction runoff and drainage patterns for the 100-year frequency and 24-hour runoff event.
186. Provide supporting calculations and a drainage diagram for the off-site and on-site runoff during the 100 year/24 hour event.
187. Provide a draft stormwater and an erosion/sediment control plan for the SFERP, the water pumping station, laydown area and associated linear facilities (potable and process water pipelines, natural gas pipeline, and transmission line) that includes the following:
 - a) a site map at 1"=100' or less that depicts existing and proposed topography (contours) with labeled elevations, site perimeter, existing and proposed buildings, drainage patterns to stormwater inlets, and on-site and off-site soil stockpile areas;
 - b) a discussion of the Best Management Practices (BMP) to be implemented which will divert off-site drainage from entering the site and a BMP construction sequence on the site map;
 - c) a complete mapping symbols legend on the site map;
 - d) on-site stormwater calculations in the narrative; and
 - e) a statement of quantities of material excavated and or/filled and the amount of such material to be imported or exported from the site or associated linear facilities.

San Francisco Electric Reliability Project (SFERP)
Supplement A Data Requests
(04-AFC-1)

BACKGROUND

The AFC Supplement A mentions in Section 8.14.4.4 that the depth to groundwater at the project site is approximately 5 to 10 feet. Section 8.14.4.4 further states that the quality of the groundwater is generally unknown but there is a high likelihood that groundwater quality has been affected by current and former industrial land use. During foundation excavation, there is the possibility that groundwater will be encountered resulting in the dewatering and discharge of the groundwater to the city's combined sewer system. Dewatering activities may result in accelerated groundwater movement and contamination of areas which otherwise may not have been affected.

DATA REQUEST

188. Provide a groundwater chemical characteristics table of all constituents identified in Supplement A, Table 8.14.2, for the Islais Creek groundwater basin in the vicinity of the SFERP site.
189. Provide the location of the well where the groundwater sample was obtained and the location of all wells within a one mile radius of the SFERP.

BACKGROUND

The AFC Supplement A mentions in Section 8.14.5.1.3 that the city's auxiliary water supply system is also available for fire protection needs.

DATA REQUEST

190. What is the average annual yield and source of the city's auxiliary water supply system?

BACKGROUND

The SFERP will require three separate pipelines (natural gas, potable water and recycled water) for project operation. Hydrostatic testing is the industry standard for testing pipeline integrity.

DATA REQUEST

191. Provide an estimate, in gallons, of the amount of water required to perform hydrostatic testing for each pipeline.
192. Provide a discussion of alternative sources of hydrostatic test water for the natural gas and recycled water pipelines that can be used in lieu of water suitable for potable use.

**San Francisco Electric Reliability Project (SFERP)
Supplement A Data Requests
(04-AFC-1)**

TECHNICAL AREA: Visual Resources

AUTHOR: Mark R. Hamblin and William Walters

BACKGROUND

Staff needs to determine if any new visible plume frequency modeling analysis for the cooling tower is necessary at the new location.

DATA REQUEST

193. Please provide written confirmation that the cooling tower operating assumption values presented in the applicant's previous visible plume modeling data request response(s) and found in Informal Data Responses Set 1A, (Docket 04-AFC-1 dated August 2, 2004) are still valid for the currently proposed project. If the previous cooling tower operating assumption values are no longer valid, please provide the new values for the proposed project requested in Data Request Set 1A (noted above).